### U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

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#### **SULFUR IN MAY 1997**

During the month, production of combined Frasch and recovered elemental sulfur was 920,000 metric tons, according to the U.S. Geological Survey. May production was slightly higher than that of April 1997 and 3% higher than that of May 1996. Shipments of these combined products were 1% lower than those of April 1997.

Import and export data for May 1997 were not available at the

time of publication. Import/export data and apparent consumption for May 1997 will be published in the June 1997 Sulfur Mineral Industry Surveys. Imports of recovered sulfur for April 1997 were 105,000 tons. Exports of sulfur, for the same period, were 3,000 metric tons. Imports of sulfuric acid for April 1997 were 119,000 tons; exports were 7,000 tons.

# TABLE 1 SALIENT SULFUR STATISTICS 1/

#### (Thousand metric tons)

		Shipments,			
Period	Frasch	Petroleum 2/ Na	Petroleum 2/ Natural gas 3/		all sources
1996	W	5,370	4,970	10,300	10,400
JanMay 1996	W	2,190	2,140	4,320	4,290
1996:					
May	W	467	422	889	863
June	W	416	397	813	763
July	W	433	427	860	832
August	W	468	432	900	917
September	W	440	401	841	872
October	W	466	412	878	885
November	W	481	354	835	858
December	W	484	413	897	949
1997:					
January	W	444	425	869	872
February	W	393	407	800	798
March	W	448	467	915	907
April	W	490	428	918	945
May	W	498 p/	422 p/	920 p/	934 p
Total	W	2,280	2,150	4,420	4,450

- p/ Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."
- $1/\,\mbox{Data}$  are rounded to three significant digits; may not add to totals shown.
- 2/ Includes a small quantity from coking operations.
- 3/ Includes data from Frasch producers.

TABLE 2 U.S. IMPORTS OF SULFUR 1/

#### (Thousand metric tons and thousand dollars)

	Car	nada	Mexic	О	Total, all coun	tries 2/
Period	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1996:	1,090	31,000	467	21,200	1,730	61,600
JanApr. 1996	367	13,600	129	6,400	534	23,500
1996:						
April	82	2,220	37	1,990	119	4,660
May	119	2,400	37	1,280	186	5,520
June	114	2,100	36	1,760	180	4,860
July	111	4,610	36	1,680	148	6,700
August	80	1,590	57	2,510	157	4,910
September	59	1,380	58	2,470	135	4,410
October	92	2,170	19 e/	826	111	3,110
November	81	1,740	40	1,750	155 e/	4,670
December	66	1,350	57	2,510	123	3,950
1997:						
January	74	1,440	60	2,730	134	4,360
February	82	1,870	41	3,220	122	5,290
March	83	1,620	61	2,550	159 r/	5,150
April	84	1,740	21	989	105	3,360
Total	323	6,670	183	9,500	520	18,200

e/ Estimated. r/ Revised.

- $1/\,\mbox{Data}$  are rounded to three significant digits; may not add to totals shown.
- $2/\,\mbox{May}$  include other countries not listed.
- 3/ Declared customs valuation.

Source: Bureau of the Census; as adjusted by U.S. Geological Survey.

# TABLE 3 U.S. IMPORTS OF SULFURIC ACID 1/

### (Thousand metric tons and thousand dollars)

		Canada			Europe			Total 2/	
		Sulfur			Sulfur			Sulfur	
Period	Quantity	content	Value 3/	Quantity	content	Value 3/	Quantity	content	Value 3/
1996:	1,600	522	41,000	210	69	2,520	2,080	682	48,500
JanApr. 1996	492	161	13,600	95	32	1,230	733	240	16,500
1996:									
April	126	41	3,620	40	13	421	202	66	4,350
May	147	48	3,990	20	7	223	192	63	4,510
June	113	37	2,670	21	7	160	140	46	3,460
July	106	35	2,770	21	7	86	132	43	3,210
August	127	41	3,260	11	3	176	138	45	3,620
September	156	51	3,760	19	6	70	195	64	4,160
October	144	47	3,690				161	53	3,890
November	166	54	3,900	10	3	79	223	73	4,330
December	146	48	3,360	13	4	496	167	55	4,860
1997:									
January	108	35	3,080	13	4	207	145	47	4,650
February	135	44	3,320				139	45	4,250
March	131	43	3,390	28	9	116	192	63	4,330
April	119	39	3,050				119	39	3,200
Total	493	161	12,800	41	13	323	595	194	16,400

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\bf TABLE~4}$  U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/

### (Thousand metric tons and thousand dollars)

	Sulf	ur	S	ulfuric acid	
	-			Sulfur	
Period	Quantity	Value 2/	Quantity	content	Value 2/
1996:	913	51,700	117	38	12,300
JanApr. 1996	370	23,000	36	11	4,010
1996:	•				
April	120	6,720	7	2	938
May	15	2,330	9	3	1,080
June	124	4,990	8	3	785
July	62	3,160	9	3	978
August	139	7,280	12	4	1,090
September	36	1,910	12	4	1,080
October	92	3,760	12	4	1,440
November	59	3,510	10	3	869
December	16	1,810	9	3	1,020
1997:	· <u> </u>				
January	10	746	11	4	1,170
February	(3/)	15	7	2	834
March	10	856	10	3	1,030
April	3	290	7	2	931
Total	23	1,910	35	11	3,960

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

<sup>2/</sup> May include other countries not listed.

<sup>3/</sup> Declared customs valuation.

<sup>2/</sup> Declared f.a.s. (free alongside ship) valuation.

<sup>3/</sup> Less than 1/2 unit.

# TABLE 5 U.S. CONSUMPTION OF SULFUR 1/

### (Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1996:	9,460	1,730	11,200
JanApr. 1996	3,060	534	3,590
1996:	<del></del>		
April	778	119	897
May	848	186	1,030
June	639	180	819
July	770	148	918
August	778	157	935
September	836	135	971
October	793	111	904
November	<del></del> 799	155 e/	954
December	933	123	1,060
1997:			
January	862	134	996
February	798	122	920
March	<del></del>	159 r/	1,060 r/
April	942	105	1,050
Total	3,500	520	4,020

- e/ Estimated. r/ Revised.
- $1/\,\mbox{Data}$  are rounded to three significant digits; may not add to totals shown.
- 2/ Calculated as shipments minus exports.

 ${\it TABLE~6}$  RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES, BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

#### (Thousand metric tons)

	May 19	97 p/	April 1	997	Total 1	997 2/	Total	1996
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	6	6	8	8	38	37	217	225
Natural gas	17	15	14	14	75	74	51	51
Total	23	21	22	22	113	112	267	276
PAD 2:								
Petroleum and coke	87	86	80	79	401	402	927	925
Natural gas	3	3	3	4	15	15	50	49
Total	90	88	83	83	416	417	977	975
PAD 3: 3/								
Petroleum and coke	294	308	297	289	1,346	1,357	3,140	3,106
Natural gas 4/	314	319	323	348	1,621	1,646	3,860	3,921
Total 5/	608	627	620	637	2,967	3,003	7,000	7,027
PAD 4 and 5: 6/								
Petroleum and coke	112	110	106	110	488	493	1,090	1,101
Natural gas	87	87	87	93	437	430	1,010	992
California	90	90	87	91	387	393	828	834
Total	199	197	193	203	925	923	2,100	2,093
Grand total	920	934	918	945	4,420	4,454	10,300	10,371

#### p/ Preliminary.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ May include revisions to prior months.
- 3/ Includes Puerto Rico and the U.S. Virgin Islands.
- 4/ Frasch production is included in the natural gas production to avoid disclosing company proprietary data.
- 5/ Includes data from Frasch producers.
- 6/ Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

# TABLE 7 COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS 1/

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

		1997		1996
	May	April	Year to date	total
Production	10.80 p/	11.20	10.70	10.30
Shipments	11.00 p/	11.50	10.80	10.40
Exports of sulfur	NA	0.04	0.07	0.91
Imports of sulfur:				
Canada	NA	1.02	0.98	1.09
Mexico	NA	0.26	0.56	0.47
Total	NA	1.28	1.54	1.73
Exports of H2SO4	NA	0.09	0.11	0.12
Imports of H2SO4:	-			
Canada	NA	1.45	1.50	1.60
Europe	NA		0.12	0.21
Total 2/	NA	1.45	1.81	2.08
Consumption: 3/				
Domestic sources	NA	11.50	10.60	9.46
Imports	NA	1.28	1.54	1.73
Total	NA	12.70	12.20	11.20
Sulfur export values 4/	NA	\$97	\$83	\$57
Sulfur import values: 4/				
Canada	NA	\$21	\$21	\$28
Mexico	NA	\$47	\$52	\$45
Average	NA	\$32	\$35	\$36
H2SO4 export values 4/	NA	\$133	\$113	\$106
H2SO4 import values: 4/				
Canada	NA	\$26	\$26	\$26
Europe	NA		\$8	\$12
Average	NA	\$27	\$28	\$23

p/ Preliminary. NA Not available.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Includes other countries not listed.

<sup>3/</sup> Because trade data was not available, May consumption was not determined.

<sup>4/</sup> Average value per ton for most recent data available.